



IES2000 SERIES

Layer-3 Rack-mounted Industrial Switch



Wide-range working
temperature 800,000
hours MTBF



Advanced Hardware
Architecture and
Industry-leading Port
Density



Varied Service
Characteristics Versatile
IPv6 Solution Complete
Security Mechanism



IP40 protection 6KV
lightning protection

Product Overview

BDCOM IES2000 series, based on the brand-new high-performance hardware and BDROS software system of BDCOM's independent intellectual property rights, supports rich Layer-2/Layer-3 routing and industrial ring network protocols. IES2000 series adopts die-casting aluminum shell and standard 19-inch rack-mounted installation, and provides redundant wide-voltage industrial power supplies. With the reliable industrial Ethernet ring technology, its hardware-based algorithm can ensure node self-healing time less than 5 milliseconds, and the ring network self-healing time less than 50 milliseconds (typical value).

BDCOM IES2000 series, with fanless design, low power consumption, wide temperature and wide voltage in compliance with strict industry standards, can adapt to harsh environment requirements for EMC, anti-vibration and shock-proof capabilities, IP40 protection level. IES2000 series can be widely used in energy, transportation, industrial production, environmental protection, military industry.

Product Characteristics

Lightning protection level: 6KV. IP40 protection, industrial fanless thermal conduction. Supports dual 220V wide-voltage industrial power input (DC model is optional). Business ports, management ports, power input terminals, and relay alarm output are located on the front panel, complying with industrial operation specifications.

Supports STP/EAPS/ERPS, Supports node self-healing time less than 5 milliseconds, and ring network self-healing time less than 50 milliseconds (typical value). Supports layer-3 static routing, dynamic routing (RIP, OSPF), Virtual Router Redundancy Protocol (VRRP). Supports virtual stacking.

Supports to form a self-healing ring between any two ports, and supports multiple independent self-healing rings. Provides Data Leakage Prevention (DLP), to quickly recover from network failures.

Supports simple network management protocol (SNMP) and cloud-based operating platform (COP). The mean time between failures (MTBF): more than 800,000 hours.

Model Lists



IES2000-5024T4S

- 24 Gigabit TX ports
- 4 Gigabit SFP ports



IES2000-5024T8C4X

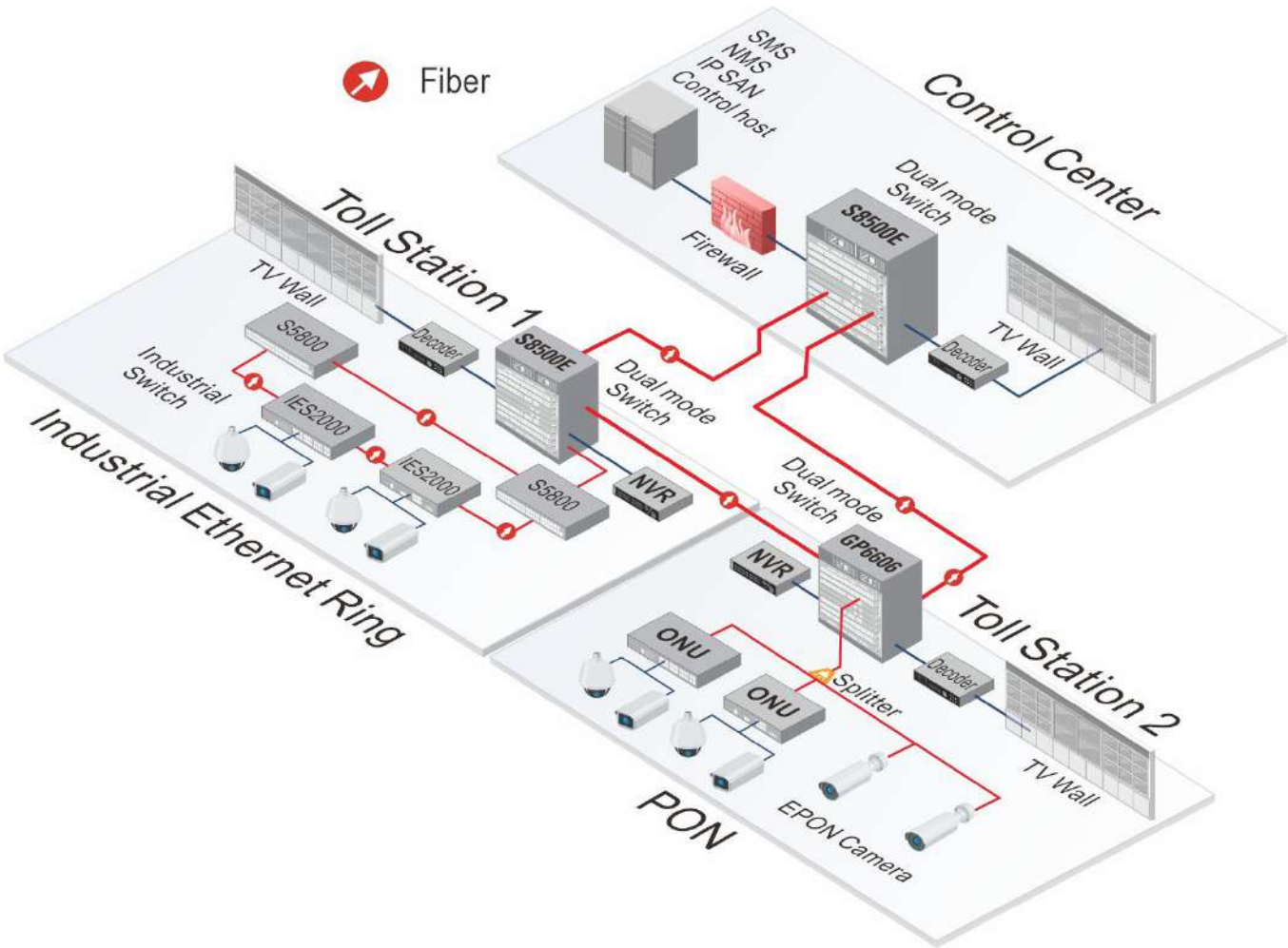
- 16 Gigabit TX ports
- 8 TX/SFP combo ports
- 4 GE/10GE SFP+ ports



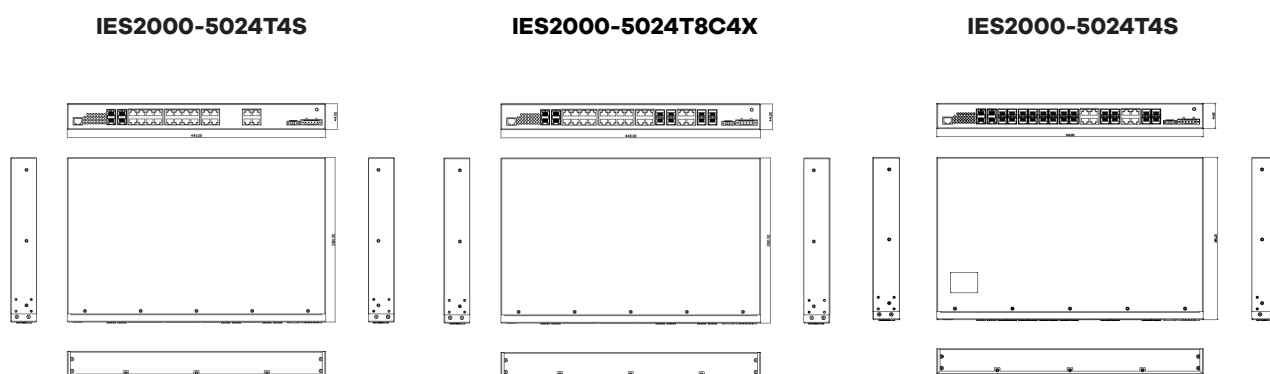
IES2000-5024S8C4X

- 16 Gigabit SFP ports
- 8 TX/SFP combo ports
- 4 GE/10GE SFP+ ports

Application Diagram



Panel Diagram



Product Specifications

Item		IES2000-5024T4S	IES2000-5024T8C4X	IES2000-5024S8C4X
Interface		24 Gigabit TX ports 4 Gigabit SFP ports	16 Gigabit TX ports 8 TX/SFP combo ports 4 GE/10GE SFP+ ports	16 Gigabit SFP ports 8 TX/SFP combo ports 4 GE/10GE SFP+ ports
Console		1 RJ45 port	1 RJ45 port	1 RJ45 port
Backplane		128 Gbps	128 Gbps	128 Gbps
Forwarding rate		42 Mpps	96 Mpps	96 Mpps
Chassis	Dimensions (WxDxH)(mm)	440x280x44	440x280x44	440x280x44
	Weight (KG)(empty)	2.6	2.7	3
Package	Dimensions (WxDxH)(mm)	576*448*94		
	Weight(KG)	3.4	3.5	3.8
Power consumption	no-load	13.5W	15.5W	20W
	full-load	30.05W	33.25W	38.6W
Power supply		Dual AC or DC 100~240V	Dual AC or DC 100~240V	Dual AC or DC 100~240V
Total output BTU (1000BTU/H=293W)		102.56	113.48	131.74
MTBF(H)		>800,000	>800,000	>800,000
Forwarding mode		Store-forward	Store-forward	Store-forward
Flash (MB)		16	16	16
DRAM (MB)		256	256	256
MAC		16K	16K	16K
Buffer size(Mb)		12	12	12
Jumbo frame		9K	9K	9K
Total SVI		64	64	64

Features

VLAN

- 4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN, Voice-VLAN

Spanning Tree

- 802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
- BPDU guard, root guard and loopback guard

Multicast

- IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter

IP

- Static route, RIP, OSPF
- IPv4/v6 dual stack

Ipv6

- ICMPv6, DHCPv6, ACLv6 and Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD V1, MLD snooping
- IPv6 Static Routing, RIPng, OSPFv3
- Manual tunnel, ISATAP tunnel, 6 to 4 tunnel

QoS

- CAR, HQoS, MAC/IP/TCP/UDP/VLAN/ COS/ DSCP/ TOS based QoS, 802.1P/ DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping

Security

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky
- DAI & IP source guard, PPPoE+,
- IEEE 802.1x, AAA, Radius and BDTacacs+
- L2/L3/L4 ACL flow identification and
- Port security, IP+MAC+port binding filtration Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc.
- Broadcast/multicast/unknown unicast storm-control
- MD5, SHA-256, RSA-1024, AES256, etc.

Virtualization

- Support BDCOM Virtual Stacking System (BVSS)
- up to 16 stacking units

DHCP

- DHCP server/relay/client
- DHCP snooping/option82

Reliability

- Static/LACP link aggregation, Interface backup
- EAPS and ERPS
- ISSU uninterrupted system upgrade
- BVSS, ups to 16-units per stack
- VRRP
- UDLD

Management

- Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP
- ZTP
- SPAN, RSPAN
- Dying gasp*

Environment

- Operating temperature/ humidity: -40~85°C ,10%-90% non-condensing
- Storage temperature/humidity: -40~85°C , 5%-95% non-condensing

Accessories

- Power cord, rackmount kits, console cable